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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,422	06/05/2001	Rainer Hagel	306.36690CC2	5131

20457 7590 02/06/2003

ANTONELLI TERRY STOUT AND KRAUS
SUITE 1800
1300 NORTH SEVENTEENTH STREET
ARLINGTON, VA 22209

EXAMINER

FELTON, AILEEN BAKER

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 02/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/873,422

Applicant(s)
Hagel et al

Examiner
Aileen Felton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM

~~THE MAILING DATE OF THIS COMMUNICATION.~~

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Dec 12, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-13 is/are pending in the application.
- 4a) Of the above, claim(s) 9, 10, and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-8, 11, and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 6) ☐ Other:

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DETAILED ACTION

1. Claims 9, 10, and 13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species (the species containing the primary explosive has been withdrawn), there being no allowable generic or linking claim. Election was made without traverse in Paper No. 9.

Specification

2. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

Claim Objections

3. Claims 3 and 4 objected to because of the following informalities: Claims 3 and 4 contain the word "nitrided", it appears that Applicant intends this to be "nitrated". (Claim 3, line 11 and claim 4, line 2)

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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5. Claims 6, 7, 8, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6 and 7 both contain improper Markush groups. Applicant should refer to claim 3 which contains a properly written Markush group.

Regarding claims 6, lines 4 and 7, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claim 7, line 3, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 12 provides for the use of an ignition mixture, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinzelmann(3,682,727).

Heinzelmann et al discloses an igniter composition that can comprise boron as the reducing agent, potassium nitrate as the oxidizer, nitrocellulose as the secondary explosive, and polyurethanes the binder. However, there is not a specific example of these specific ingredients and there is no mention of laser ignition.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the ingredients disclosed by Heinzelmann in order to optimize the performance of the igniter. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). The ability to be ignited by laser is an inherent property of the composition of Heinzelmann. Where a product appears to be the same or only slightly different, the properties recited appear to be inherent, regardless of the method of preparation. The Office does not have testing facilities to determine such. The burden falls on applicant to show that the prior art products do not

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necessarily or inherently possess the claimed properties. *In re Thorpe*, 777 F.2d 695, 697; 227 USPQ 964, 966; *In re Fitzgerald*, 619 F.2d 67, 70; 205 USPQ 594, 596; *In re Best*, 562 F.2d 1252, 1255; 195 USPQ 430, 433-434; *In re Brown*, 459 F.2d 531; 173 USPQ 685.

8. Claims 1, 3, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinzelmann(3,682,727) in view of Petrick(5,421,264).

Heinzelmann et al discloses an igniter composition that can comprise boron as the reducing agent, potassium nitrate as the oxidizer, nitrocellulose as the secondary explosive, and polyurethanes the binder. However, there is not a specific example of these specific ingredients and there is no mention of laser ignition.

Petrick teaches primer compositions that are ignitable by laser and suggests that any suitable primer can be used with laser ignition(col. 5, lines 1-14).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the ingredients disclosed by Heinzelmann in order to to optimize the performance of the igniter. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. It would also be obvious to use laser ignition with the composition of Heinzelmann since Petrick suggests that any primer can be used with laser ignition.

9. Claims 1, 3-8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagel et al(4,956,029) and Hagel et al(4,363,679).

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Hagel et al('029) discloses an igniter composition that can comprise zinc peroxide as the oxidizing agent, polynitropolyphenylene or nitrated aromatic polyethers as the secondary explosive, and magnesium as the reducing agent. The composition can also include binders. However, there is not a specific example of these specific ingredients, there is no mention of laser ignition and the mixing and pressing is not disclosed.

Hagel et al('679) teaches an igniter composition that is mixed and pressed(col. 5, lines 30-35).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the ingredients disclosed by Hagel('029) in order to to optimize the performance of the igniter. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). The ability to be ignited by laser is an inherent property of the composition of Hagel. Where a product appears to be the same or only slightly different, the properties recited appear to be inherent, regardless of the method of preparation. The Office does not have testing facilities to determine such. The burden falls on applicant to show that the prior art products do not necessarily or inherently possess the claimed properties. *In re Thorpe*, 777 F.2d 695, 697; 227 USPQ 964, 966; *In re Fitzgerald*, 619 F.2d 67, 70; 205 USPQ 594, 596; *In re Best*, 562 F.2d 1252, 1255; 195 USPQ 430, 433-434; *In re Brown*, 459 F.2d 531; 173 USPQ 685. It would also

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be obvious to prepare the igniters of Hagel et al('029) by mixing and pressing as suggested by Hagel et al('679) since it is suggested that the pressing produces a more violent reaction.

10. Claims 1 and 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagel et al(4,956,029) in view of Petrick(5,421,264) and Hagel et al(4,363,679).

Hagel et al('029) discloses an igniter composition that can comprise zinc peroxide as the oxidizing agent, polynitropolyphenylene or nitrated aromatic polyethers as the secondary explosive, and magnesium as the reducing agent. The composition can also include binders. However, there is not a specific example of these specific ingredients, there is no mention of laser ignition and the mixing and pressing is not disclosed.

Petrick teaches primer compositions that are ignitable by laser and suggests that any suitable primer can be used with laser ignition(col. 5, lines 1-14).

Hagel et al('679) teaches an igniter composition that is mixed and pressed(col. 5, lines 30-35).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the ingredients disclosed by Heinzelmann in order to to optimize the performance of the igniter. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. It would also be obvious to use laser ignition with the composition of Heinzelmann since Petrick suggests that any primer can be used with laser ignition. It would also be obvious to prepare the igniters of

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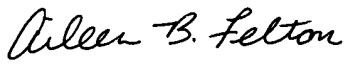
Hagel et al('029) by mixing and pressing as suggested by Hagel et al('679) since it is suggested that the pressing produces a more violent reaction.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aileen Felton whose telephone number is (703) 306-5751. The examiner can normally be reached on Monday through Friday from 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.


Aileen B. Felton